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ABSTRACT

Publication number: S51-132509
Date of Publication: November 17, 1976
Int. CI. B60C 19/12
Application number: S50-56832
Date of filing: May 12, 1975
Applicant: Yasuyuki Tanaka

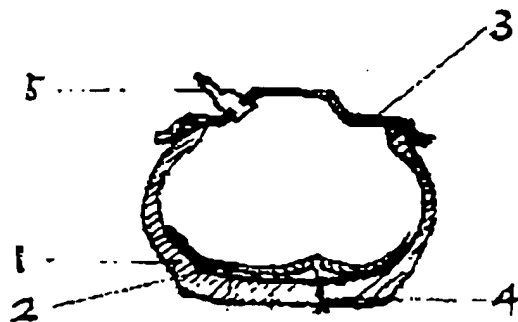
A TIRE BLOWOUT PREVENTION MECHANISM

Abstract:

PROBLEM TO BE SOLVED: To provide the tire in which tire blowout is prevented even if jagged objects such as pegs are bit into a tread of tire.

SOLUTION: To achieve this object, there is provided a flap 2 at the inside face of tire 1. This flap 2 is made of rubber cloth or steel cord belt having the characteristics of toughness and elastic flexibility.

Thus, if a peg 4 projects into tire 1, since the flap 2 displaces inward, the peg 4 does not burst through the flap 2. Thereby tire blowout is prevented.



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(54) DEVICE FOR PREVENTING PUNCTURE OF TYRE

(11) Kokai No. 51-132509 (43) 11.17.1976 (21) Appl. No. 50-56832

(22) 5.12.1975

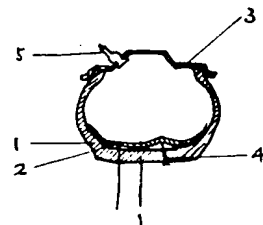
(71) YASUYUKI TANAKA (72) YASUYUKI TANAKA

(52) JPC: 77B54

(51) Int. Cl.² B60C19/12

PURPOSE: To provide a device for preventing puncture of a tyre which is not damaged by a foreign matter, such as a nail or the like, piercing through the tread by absorbing the rupturing force of the foreign matter such as a nail or the like.

CONSTITUTION: There is spread internally of the inside tyre tread a flap 2 made of a material, such as a canvas cloth coated with rubber or the like, which is tough, elastic and air-tight, and which serves to absorb the rupturing force by the foreign matter such as a nail 4 piercing through the tyre 1 by being depressed inwardly. As a result, the tyre is not damaged to keep the normal air pressure, and may be recovered to the initial state if the foreign matter such as a nail or the like is removed.

**(54) TYRE REPLACEMENT DEVICE**

(11) Kokai No. 51-132510 (43) 11.17.1976 (21) Appl. No. 50-56010

(22) 5.14.1975

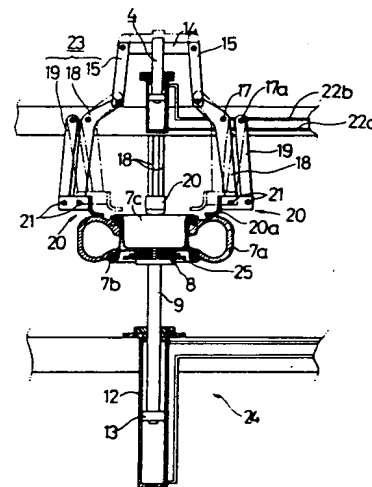
(71) TOA KOKI K.K. (72) AKIO IDE

(52) JPC: 77B55

(51) Int. Cl.² B60C25/06

PURPOSE: To provide a tyre replacement device adapted for easily securing to or removing from a disk wheel a tyre which is attached to a vehicle of any type including a common automobile and a large-sized special vehicle.

CONSTITUTION: The device is provided with a plurality of retainers 20 for being abutted against the tyre 7a of the wheel 7, a link mechanism 5 for adjusting the distances between the retainers from one another while retaining the horizontal positions of the retainers at the initial positions, a carrier 8 for carrying the disk wheel 7c of the wheel and for moving the same toward the retainers.

**(54) TRACK FOR TRANSPORTATION APPARATUS OF AIR CUSHION TYPE**

(11) Kokai No. 51-132511 (43) 11.17.1976 (21) Appl. No. 50-55459

(22) 5.13.1975

(71) NIHON SEIKOSHO K.K. (2)

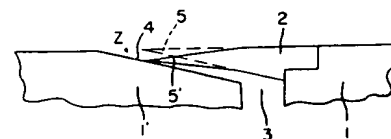
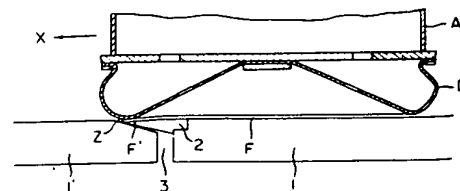
(72) KIYOSHI MATSUMOTO (1)

(52) JPC: 78A9

(51) Int. Cl.² E01B25/00

PURPOSE: To prevent the jointed portions of a track from causing obstructions for passing through an air bearing, even when the track is expanded or contracted as the ambient temperature is raised or lowered.

CONSTITUTION: When a gap 3 of the jointed portion between the tracks 1 and 1' is separated, the tip end portion 5 of the lip 2 of the track 1 is lowered by its own weight and thus allowed to be in condition shown by numeral 5' thereby to contact with the bevelled portion 4 of the track 1'. The tip end portion of the lip is further pressed against the bevelled portion by the action of air pressure applied from an air bearing A when a diaphragm D of the air bearing A travels on the jointed portion. An uniform and annular groove F' is formed in the recess Z to facilitate smooth travelling.

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特 許 願

(2000円)

昭和 50 年 5 月 12 日

特許庁長官

殿

1. 発 明 の 名 称 **タイヤのパンク防止装置**

2. 発 明 者

住 所 (居所)

氏 名

特許出願人と同じ

3. 特 許 出 願 人

郵便番号

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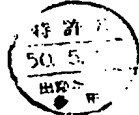
田 中 康 之

4. 添付書類の目録

- (1) 明 細 書
- (2) 図 面
- (3) 願書副本
- (4) ()

方式 1 通
1 通
1 通
通

特 許 願



明 細 書

1. 発 明 の 名 称

タイヤのパンク防止装置

2. 特 許 請 求 の 範 囲

ゴム引きの布キャンバス等強靱性と弾力性と気密性をもった材料で作ったフラップ(2)をタイヤの内側トレッドの裏の部分に敷き釘(4)などの異物がタイヤを貫通した場合(2)のフラップが内側にへこむ事によってこれらの破断力を吸収しこれによって破損される事なくタイヤの空気圧を維持し(4)を除去すると直ちに原状に復するタイヤのパンク防止装置

3. 発 明 の 詳 細 な 説 明

タイヤのパンクの原因の殆んどは釘などの異物がタイヤのトレッドの部分を通り抜けてタイヤのチューブを破損したりチューブレスタイヤの場合はタイヤが内部まで破損するとそこから空

気が外部に抜けてパンクしてしまふ。この釘などの異物によるパンクを防ぐため本発明はタイヤの内側のトレッドの裏の部分にゴム引きの布キャンバス又はスチールコードをゴム引きした様な強靱性とある程度の弾力性をもち、然も気密を保つことの出来る材料で作ったフラップを敷き釘などの異物がトレッドを貫通してこのフラップに達した時、内側にへこむ事によって釘などの破断力を吸収しこれによって破損される事なく内部の空気圧を維持し、釘などが自然に抜けたりあるいは除去した場合は内部の空気圧により直ちに原状に復する。

次に図面により本発明を説明すると第1図は本発明の装置の全体であり、これを第2図に示すごとくタイヤの内側トレッド(1)の裏の部分に敷き、第3図の如く釘がタイヤトレッド(1)を貫通し(2)に達しなおも内部に進入しようとする(2)は図の如く内部にへこみ、(4)の力を吸収してつき破れることがないのでタイヤ内部の空気圧は正常に維持される。又、(5)の釘が自然に抜

① 日本国特許庁

公開特許公報

① 特開昭 51 - 132509

④ 公開日 昭51. (1976) 11. 17

② 特願昭 50 - 56832

② 出願日 昭50. (1975) 5. 12

審査請求 未請求 (全2頁)

庁内整理番号

6542 37

⑤ 日本分類

77 B54

⑤ Int. Cl²

B60C 19. 12

けたり又は除去した場合、内部の空気圧により
(2)は直ちに第3図の常態になり、まったく平常
でもどる。

4. 図面の簡単な説明

第1図は本発明のフラップの全断面図、第2
図は本発明のフラップを組み込んだホイールの一部
断面図、第3図はタイヤトレッドに釘が貫通し
た状態のタイヤの一部断面図

- 1.....タイヤのトレッド
- 2.....本発明のフラップ
- 3.....ホイール
- 4.....釘
- 5.....エアバルブ

特許出願人 田 中 康 之

